



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

D5770-5

Job Sheet 207410



Part No: D5770-5

Job Qty: 8 pcs

Part Name: Hoop



Part Weight: 0 lbs

Job Created: 2/25/20

Due Date: 3/6/20

Type: Stock

Status: New

Job Tracking No:

Created By: Jennifer Renwick

Description:

Priority: Medium

Note: URF 20-522 DWG 5770 REV.A IPP REV:A NEW ISSUE 20.01.14 JV VERF:DD

Ship Via:

## Bill of Materials

## Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
					Hrs	Hrs			
100	Large Fab - Welded Assy-1	8 pcs	3/6/20	0.00	2.67		Large Fab - 1		
							Large Fab - 10		
							Large Fab - 2		
							Large Fab - 3		
							Large Fab - 4		
							Large Fab - 5		
							Large Fab - 6		
							Large Fab - 7		
							Large Fab - 8		
							Large Fab - 9		
							Large Fab - 11 (Various)		
							Large Fab - 12		
110	QC 5	8 pcs	3/6/20	0.00	0.00		QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							QC 5 - 61		
							QC 5 - 81		



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Container No: S259556



Part: D5770-5

Job No: 207410

Serial No/Batch: S259556

Revision: REV.A

Inspector:

Exp Date:

Instructions:

Date: 02/26/20

Plex 2/26/20 10:03 AM Dart.lajeunesse.marie



120	Packaging 3-1 - Stock - B4B	8 pcs	3/6/20	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
					Packaging 3 - 37 - B4B	
130	QC 21 - SA	8 pcs	3/6/20	0.00 0.00	QC 21 - SA - 21	
					QC 21 - SA - 70	
					QC 21 - SA - 53	

DAS  
24  
9-89

DAS

21

9-89

MAR 02 2020

Part Op 100 - 1- Cut material to 53" 2- Bend and drill #30 vent hole as per D5770-5 dwg 3- Remove markings on tube 4- Deburr  
 Descriptions: 110 - (QC5- Inspect part completeness to step on W/O)  
 120 - Identify as per dwg & Stock Location: W4004 See note 6.  
 130 - QC21- Final Inspection - Work Order Release

## Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M4130NTS0.500W.035	4130 Square Tube .500 X .500 X .035W	35.3328 ft (4.4166 ea)	100-Large Fab - Welded Assy-1	132313

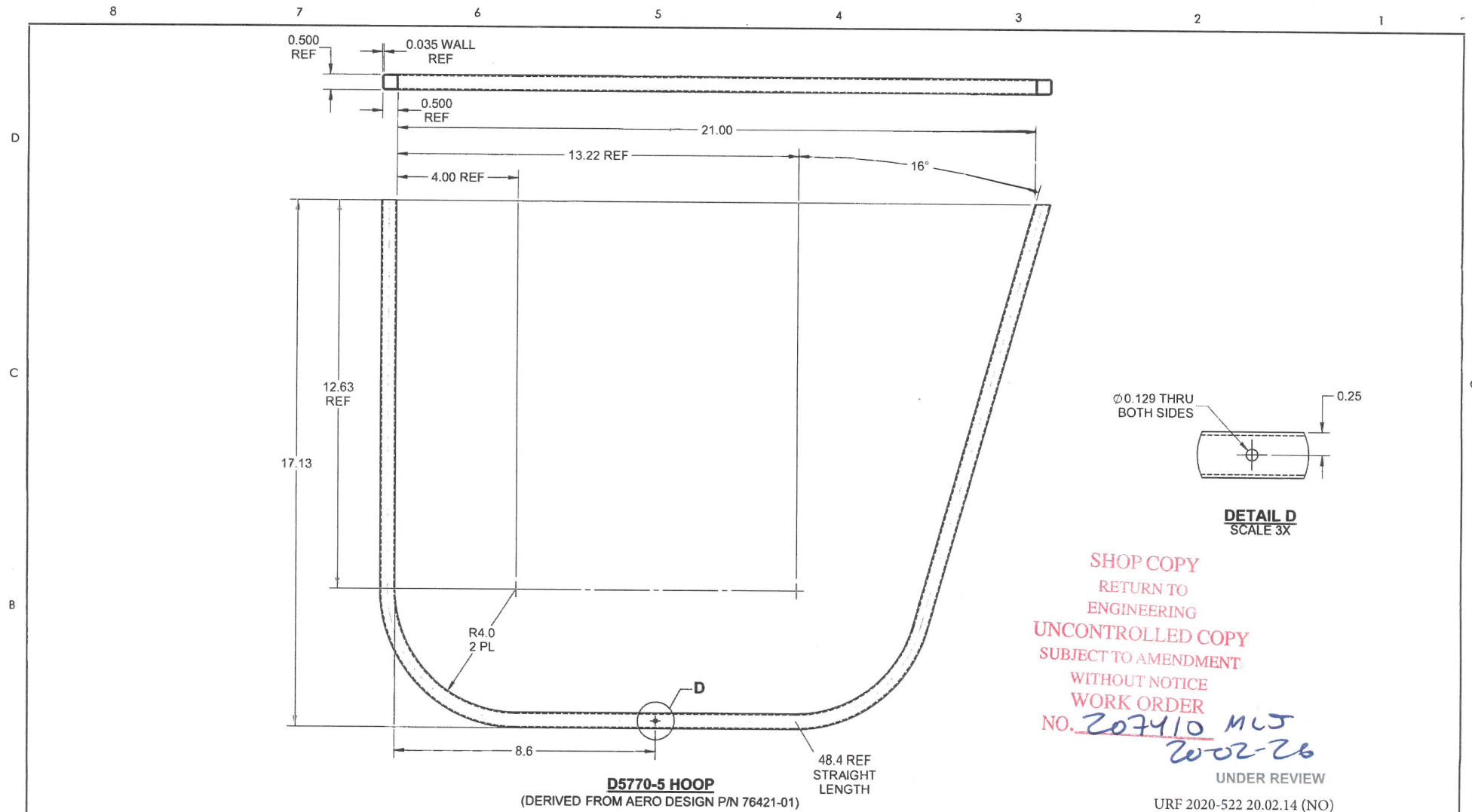
## Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Large Fab - Welded Assy-1	M4130NTS0.500W.035	35	72	0

## Part Specifications

Specifications could not be found.





# NOTES:

- 1) MATERIAL: AISI 4130N STEEL SQUARE TUBING, 1/2 X 0.035 WALL  
PER MIL-T-6736 OR AMS 6371/6370/6361/6362/6373/6374  
REF DART SPEC M4130N-TS0.500W.035
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044
- 7) WEIGHT: 0.85 lbs

RELEASED

2020 FEB 18/10

APPROVED

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A
MFG. APPR.	DD	D5770	SHEET 5 OF 7
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	BASKET HOOPS	NTS
DATE	20.01.09	COPYRIGHT © 2020 BY DART AEROSPACE LTD	
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# Purchase Order Receipt Listing

Page 1 of 1

Tuesday, May 19, 2015 8:28:06 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO28412 Receipt Dates from 5/19/2015 to 5/19/2015 All Line Item Types  
All Item ID/GL/WOs All Rec. Employees All Currencies  
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID/Vendor Name		VU-FAC001	Factory Steel								
PO28412	1		M4130NTS0.500W.0135		5/15/2015	5/19/2015	313.0000	\$5.98	0.0000	0	\$1,871.74
USD	No		4130 Square tube .500 x .500 x .035w m132313	f	300.0000	DCUSER		\$1,871.74	0.0000	0	
	4		71400-15	Each	5/15/2015	5/19/2015	1.0000	\$45.00	0.0000	0	\$45.00
	No		cut & pack m132313		1.0000	DCUSER		\$45.00	0.0000	0	
	5		71401-45		5/15/2015	5/19/2015	1.0000	\$0.00	0.0000	0	\$0.00
	No		PROCUREMENT QUALITY CLAUSES m132313		1.0000	DCUSER		\$0.00	0.0000	0	
Total Received Quantity:											315.0000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$1,916.74
Total Balance Due Quantity:											0.0000

# PACKING LIST

No. 46980

PG 1 OF 1

FACTORY STEEL & METAL SUPPLY 14020 OAKLAND AVENUE DETROIT, MI 48203	PURCHASE ORDER # P028412		BUYER CHANTEL LAVOIE	SHIP DATE 05/11/2015
	JOB NAME		Tel (613) 632-3336 Fax (613) 632-4443	SHIP VIA YRC
(313)883-6300 PHONE (313)883-4883 FAX	SALES ORDER # 40836	ORDER DATE 05/08/2015	SALES REP MICK HALON	RESALE # 59-2958719
SOLD TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7	SHIP TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7		SHIP INST YRC COLLECT	CARRIER YRC
			PRO#	BLIND Y/N N
			TERMS NET 30 DAYS	FOB DETROIT

LINE	QUANTITY	DESCRIPTION	WIDTH	LENGTH	WEIGHT	UNIT PRICE	TOTAL
1	313 FT	4130N CD SMLSS SQ TUBE 1/2" X .035W  Our Tag # Mill Ref # Heat # 107988 019824 571750 Pcs 14 Total Ft 313		21' 24" RL	69.266		
2	1 PC	PACKING CHARGES  MTRS (CIRCLE) FAX SHIPMENT INVOICE ALL DATE: _____ INITIAL: _____					
TOTAL WT							TOTAL
69 LBS							
RECEIVED BY - SIGNATURE			RECEIVED BY - PRINTED NAME		DATE RECEIVED		



**PLYMOUTH TUBE CO.** USA  
 1209 East 12th Street, Streator, Illinois 61354  
 Phone: (815) 673-1515 Fax: (815) 672-7343  
**TRUST YOUR SOURCE! ACCEPT NO SUBSTITUTIONS!**



## PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

108798 - 1 / 1

SOLD TO

PTC - Plymouth Engr. CD Shapes  
 201 Commerce Court  
 Hopkinsville, KY 42240  
 USA

WORK ORDER 019824  
 HEAT NUMBER 571756  
 MELT SOURCE Benteler Steel & Tube-Germany

ISO 9001, 14001  
 AND  
 TS 16949

**CERTIFIED**

CUSTOMER P.O. 2128	CUSTOMER PART SQ-N12035	QUANTITY 5,478.3 ft	LADING NO 00063335	CERT DATE 07/01/2013									
PART DESCRIPTION SHSQ0500035J000 ***** Square QD ***** Side1: 0.5000 Max:0.5100 Min:0.4900 Side2: 0.5000 Max:0.5100 Min:0.4900 Wall: 0.0350 Max:0.0380 Min:0.0320 Length: 47.00/24.00 Spec: MIL-T 6735B Seamless Aircraft Grade: 4130 Anneal: Cond N													
CERTIFICATION REQUIREMENTS FAR BAA (FAR 52.225-1 Buy America Act Supplies), DFARS 252.225-7001 By America Act & Bal. of Payments Program FAR TAA (FAR 52.225-5 Trade Agreements)(Paragraph 1,3,4,5)This material was Eddy Current tested and conforms to the requirements of ASTM A-450.The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 2640J and/or ASTM E-1444, and rated as Frequency, and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method.Material produced in accordance to ASTM A-519-12.													
Chemical Analysis													
C	Mn	P	S	Si	Al	Cr	Mo	Ni	Pb	Cu	V	Ti	Sn
.320	.54	.008	.002	.240	.031	.87	.18	.08	.001	.09	.002	.002	.011
Physical Properties													
Freq.	Severity	Grain Size											
.020	.015	9											
Mechanical Properties													
TEST	UNITS	#TESTS	HIGH	LOW	AVERAGE	STD-DEV							
Tensile	Psi	6	135100	129920	132265	2171							
Yield	Psi	6	130770	125390	127698	2170							
Elongation	%	6	22	22	22	0							
Rockwell B	Rb	6	98	98	98	0							
Rockwell C	Rc												
TEST	RESULT												
Decarb/OD	Pass												
Total ID/OD decarb	Pass												

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

*Janis Dussell*

Quality Assurance



**PLYMOUTH TUBE CO.** -USA

1209 East 12th Street, Streator, Illinois 61354  
Phone: (815) 673-1515 Fax: (815) 672-7343

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## PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

108798 - 1 / 1

SOLD TO

PTC - Plymouth Engr. CD Shapes  
201 Commerce Court  
Hopkinsville, KY 42240  
USA

WORK ORDER 019824  
HEAT NUMBER 571756  
MELT SOURCE Benteler Steel & Tube-Germany

ISO 9001, 14001  
AND  
TS 16949

**CERTIFIED**

CUSTOMER P.O. 2128	CUSTOMER PART SQ-N12035	QUANTITY 5,478.3 ft	LADING NO 00063335	CERT DATE 07/01/2013
PART DESCRIPTION SHSQ0500035J000				
<b>Additional Specification(s)</b>				
AMS-T 6736B, 6360L & 6371J				
<p>This test report data is for the heat Chemistry Stated above.</p> <p>The material in this test report is:</p> <ol style="list-style-type: none"> <li>1) Drawn in the USA</li> <li>2) Free from <u>Polybrominated Biphenyls (PBB)</u>, <u>Polybrominated Diphenyl Ethers (PBDE)</u>, and <u>Mercury</u> contamination.</li> <li>3) <u>NAFTA</u> compliant.</li> </ol> <p style="text-align: right;">End of Certification</p>				

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

*Janis Durosett*  
Quality Assurance



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO28412**

Purchase Order Date 5/8/2015 12:26:41 PM

PO Print Date 5/8/2015

Page Number 1 of 2

**Order From :**

VU-FAC001

**Ship To :** DART AEROSPACE LTD

FACTORY STEEL  
14020 OAKLAND AVE.  
DETROIT,, MI 48203  
US

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

*REVISED*

**Contact Name**

**Vendor Phone** 313 883 6300

**Ship To Contact**

**Ship To Phone**

**Ship Via:** YRC ppd

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

USD

**FOB**

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M4130NTS0.500W.035	4130 Square tube .500 x .500 x .035w	5/15/2015 Yes 5/15/2015		300.00 f	313 f. \$5.98	\$1,794.00
	MATERIAL: AISI N STEEL SQUARE TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362/6373/6374						
						<b>Line Total:</b>	<b>\$1,794.00</b>
4	71400-15	cut & pack	5/15/2015 Yes 5/15/2015		1.00 Each	\$45.00	\$45.00
						<b>Line Total:</b>	<b>\$45.00</b>

*SP15-05-19*

Note:

5/8/2015





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO28412**

Purchase Order Date 5/8/2015 12:26:41 PM

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Page Number 2 of 2

**Order From :**

VU-FAC001

**Ship To :** DART AEROSPACE LTD

FACTORY STEEL  
14020 OAKLAND AVE.  
DETROIT,, MI 48203  
US

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 313 883 6300

**Ship To Contact**

**Ship To Phone**

**Ship Via:** YRC ppd

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

USD

**FOB**

Destination-Collect

5	71401-45	PROCUREMENT QUALITY CLAUSES	5/15/2015	1.00	\$0.00	\$0.00
---	----------	--------------------------------	-----------	------	--------	--------

No

**Procurement Quality Clauses**

5/15/2015

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality document

**Line Total:** \$0.00

**PO Total:** \$1,839.00

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Change Nbr:

4

Change Date: 5/8/2015

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

Job: _____  Part No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	<b>DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Water Jet <input type="checkbox"/>            Supplier <input type="checkbox"/>            Quality <input type="checkbox"/> </div> </div>			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
<b>Root Cause</b>  <div style="display: flex; flex-direction: column;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div>		<b>FAULT CATEGORY</b>  <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced  <input type="checkbox"/> Bending  <input type="checkbox"/> Crushing  <input type="checkbox"/> Cracks  <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist  <input type="checkbox"/> Marks/Chatter  <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination  <input type="checkbox"/> Misaligned/off center  <input type="checkbox"/> BOM/Route  <input type="checkbox"/> Broken/Damage/Defect  <input type="checkbox"/> Incomplete/Unclear Instructions  <input type="checkbox"/> Drill Holes  <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Folio/Program  <input type="checkbox"/> Grain Direction  <input type="checkbox"/> Weld  <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Out of Sequence  <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong  <input type="checkbox"/> Outside Tolerance  <input type="checkbox"/> Drawing  <input type="checkbox"/> Finish  <input type="checkbox"/> Part Lost/Missing  <input type="checkbox"/> Misread         </div> </div>			
Other/Details:					